Appl. No. 10/605,744
Reply to Office action of August 10, 2007

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A video decoding unit for decoding a predetermined plurality of different video object plane (VOP) types, the decoding unit comprising:

   at least one decoding module capable of decoding a predetermined signal in each of the predetermined plurality of different VOP types and outputting a decoded result specifically corresponding to the VOP type currently being decoded, wherein the decoded result includes a plurality of parameters.

2. (original) The video decoding unit of claim 1 wherein the decoded result is based upon a predetermined lookup table specifically corresponding to the VOP type currently being decoded.

3. (original) The video decoding unit of claim 2 wherein the predetermined lookup table specifically corresponding to the VOP type currently being decoded is selected from a plurality of predetermined lookup tables specifically and respectively corresponding to the predetermined plurality of VOP types.

4. (original) The video decoding unit of claim 3 further comprising a switching circuit connected to the decoding module for determining which of the predetermined plurality of VOP types the decoding module is to decode.

5. (previously presented) The video decoding unit of claim 4 further comprising a multiplexer having an input connected to an output of the decoding module for selectively outputting the decoded result to a memory for further processing.

6. (original) The video decoding unit of claim 5 wherein the output of the multiplexer is determined by the switching circuit.

7. (original) The video decoding unit of claim 4 wherein the decoding module comprises a VOP type indicating flag.

8. (original) The video decoding unit of claim 7 wherein the VOP type indicating flag is set by the switching circuit.

9. (currently amended) The video decoding unit of claim 4 wherein the predetermined

2

Appl. No. 10/605,744
Reply to Office action of August 10, 2007

lookup table specifically corresponding to the VOP type the decoding module is to decode is transmitted from the switching circuit to the decoding module <u>only when the decoding module requires the predetermined lookup table to complete the decoding of the VOP type</u>.

5   10. (currently amended) A device comprising:

a memory;

a plurality of video decoding modules, each video decoding module capable of decoding a predetermined signal in a Data-partitioned intra video object plane (DP-I VOP) and capable of decoding the predetermined signal in a Data partitioned

10   predicted video object plane (DP-P VOP) and outputting a decoded result according to the type of VOP<u>, wherein the decoded result includes a plurality of parameters</u>;

a multiplexer having inputs respectively connected to outputs of the plurality of video decoding modules and having an output connected to the memory; and

a switching circuit connected to the plurality of video decoding modules for indicating

15   to each decoding module which type of VOP is to be decoded and connected to the multiplexer for controlling which decoded result is transmitted to the memory.

11. (original) The device of claim 10 wherein the decoded result is determined by data specifically corresponding to the VOP type currently being decoded.

12. (original) The device of claim 11 wherein the data specifically corresponding to the

20   VOP type currently being decoded is selected from a predetermined lookup table corresponding to a DP-I VOP or is selected from a predetermined lookup table corresponding to a DP-P VOP.

13. (currently amended) The device of claim 12 wherein the predetermined lookup table specifically corresponding to the VOP type the decoding module is to decode is

25   transmitted from the switching circuit to the decoding module <u>only when the decoding module requires the predetermined lookup table to complete the decoding of the VOP type</u>.

14. (original) The device of claim 10 wherein each decoding module comprises a VOP type indicating flag.

30   15. (original) The device of claim 13 wherein the VOP type indicating flag is set by the

3

Appl. No. 10/605,744
Reply to Office action of August 10, 2007

switching circuit.

16. (currently amended) A method for decoding a plurality of different types of MPEG video object planes (VOP), the method comprising:

providing a decoding module capable of decoding a predetermined signal in the
5   different types of VOP;

indicating to the decoding module which of the different types of VOP the decoding module is to decode; [[and]]

the decoding module accessing a lookup table specifically corresponding to the indicated type of VOP to decode the predetermined signal; and

10   outputting a decoded result including a plurality of parameters.

17. (original) The method of claim 16 wherein each of the plurality different types of VOP corresponds to a different lookup table.

18. (original) The method of claim 16 wherein the decoding module comprises a VOP type indicating flag and the method further comprises setting the VOP type indicating
15   flag to indicate which of the different types of VOP the decoding module is to decode.

19. (original) The method of claim 18 wherein the VOP type indicating flag is set by a switching circuit.

20. (currently amended) The method of claim 16 wherein the type of VOP the decoding module is to decode is indicated by a switching circuit, and the method further
20   comprises:

transmitting the corresponding lookup table of the type of VOP the decoding module is to decode from the switching circuit to the decoding module only when the decoding module requires the predetermined lookup table to complete the decoding of the VOP type.

25 21. (new) The video decoding unit of claim 1, wherein the decoding module is capable of storing a lookup table including lookup table information corresponding to the different VOP types.

22. (new) The device of claim 10, wherein each video decoding module is capable of storing a lookup table including lookup table information corresponding to a DP-I
30   VOP and a DP-P VOP.

4

Appl. No. 10/605,744
Reply to Office action of August 10, 2007

23. (new) The method of claim 16, wherein the decoding module is capable of storing a
    lookup table including lookup table information corresponding to the different VOP
    types.

24. (new) The method of claim 16, further comprising:

5   multiplexing an output of the decoding module to selectively output the decoded result to
    a memory for further processing.

5